

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 5 1. (Original): A composition comprising
 - a) an analog probe; and
 - b) a first recombinase coated single stranded nucleic acid probe.
2. (Original): A composition according to claim 1 further comprising a second recombinase coated single stranded nucleic acid probe which is substantially
10 complementary to said first probe.
3. (Original): A composition according to claim 1 wherein said analog probe comprises peptide nucleic acid.
4. (Original): A composition according to claim 1 wherein said analog probe is a fusion sequence comprising nucleoside analogs and naturally occurring nucleosides.
- 15 5. (Original): A composition according to claim 4 wherein said nucleoside analog comprises at least one peptide nucleoside.
6. (Original): A composition according to claim 1 wherein said first single stranded nucleic acid probe is DNA.
7. (Original): A composition according to claim 1 wherein said recombinase is a species
20 of a prokaryotic recombinase.
8. (Original): A composition according to claim 7 wherein said prokaryotic recombinase is a recA recombinase.
9. (Original): A composition according to claim 1 wherein said recombinase is a species of eukaryotic recombinase.
- 25 10. (Original): A composition according to claim 9 wherein said recombinase is a Rad51 recombinase.
11. (Original): A composition according to claim 9 wherein said recombinase is a complex of recombinase proteins.

Claims 12-35 (cancelled)

36. (New): A composition according to claim 2 wherein said analog probe comprises peptide nucleic acid.

5 37. (New): A composition according to claim 2 wherein said analog probe is a fusion sequence comprising nucleoside analogs and naturally occurring nucleosides.

38. (New): A composition according to claim 37 wherein said nucleoside analog comprises at least one peptide nucleoside.

39. (New): A composition according to claim 2 wherein said first single stranded nucleic acid probe is DNA.

10 40. (New): A composition according to claim 2 wherein said recombinase is a species of a prokaryotic recombinase.

41. (New): A composition according to claim 40 wherein said prokaryotic recombinase is a recA recombinase.

15 42. (New): A composition according to claim 2 wherein said recombinase is a species of eukaryotic recombinase.

43. (New): A composition according to claim 42 wherein said recombinase is a Rad51 recombinase.

44. (New): A composition according to claim 42 wherein said recombinase is a complex of recombinase proteins.

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